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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,239	09/28/2005	Harald Schwahn	278349US0PCT	4258
22850 7590 10/31/2008 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER HINES, LATOSHIA D				
ART UNIT 1797		PAPER NUMBER		
NOTIFICATION DATE 10/31/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/551,239

Applicant(s)

SCHWAHN ET AL.

Examiner

LATOSHA HINES

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SF/US)
Paper No(s)/Mail Date 12/28/2005
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. This is the initial Office action based on the 10/551239 application filed on September 28, 2005.
2. Claims 1-20 are pending and have been fully considered.

Claim Rejections - 35 USC § 112/101

1. Claims 17, 19, and 20 provides for the use of a lower alcohol, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 17, 19, 20 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over SCHWAHN et al. (US 2003/0140552).

With respect to claim 1 SCHWAHN et al. discloses an invention related to fuel additive compositions for internal combustion engines and to fuels that contain the corresponding additives for internal combustion engines (abstract). The fuel additive compositions preferred according to the invention comprises of: a **sulfur** content of not more than 150 ppm (paragraph 0069), a **detergent** additive selected from polyalkenemonoamines, polyalkenepolyamines, poly-etheramines and mixtures thereof (paragraph 0032), wherein the fuel additive has at least one **hydrophobic hydrocarbon** radical having a number average molecular weight (Mn) of from 85 to 20 000 and at least one polar group (paragraph 0052), and the content of **alcohols** and ethers in the gasoline fuel is usually relatively low with maximum contents at 3% by volume for methanol, 5% by volume for ethanol, 10% by volume for isopropanol, 7% by volume for tert-butanol, 10% by volume for isobutanol and 15% by volume for ethers having 5 or more carbon atoms in the molecule (paragraph 0072). The polar group is selected from: amines include both **mono-amines and poly-amines**, preferably having up to 6 nitrogen atoms; additives containing **nitro** groups, if necessary in combination with hydroxyl groups; additives containing **hydroxyl** in combination with mono- or polyamino groups, at least one nitrogen having basic properties; additives containing **carboxyl** groups or their alkali metal or alkaline earth metal salts; additives containing **sulfo** groups or their alkali metal or alkaline earth metal

salts; polyoxy-C₂-C₄-alkylene groups, **mono-amines and poly-amines**, preferably having up to 6 nitrogen atoms; **carboxylic esters** of long-chain alkanols; additives which contain groups derived from **succinic anhydride**, with hydroxyl and/or amino and/or amido and/or imido groups; additives containing groups produced by **Mannich reaction** alkylphenols with aldehydes and mono- or polyamines (paragraphs 0033, 0045, 0046, 0052). Preferred additives which can be used according to the invention are polyalkenemonoamines or polyalkenepolyamines based on polypropene or on highly reactive (i.e. having predominantly terminal double bonds-generally in the alpha- and beta-positions) or conventional (i.e. having predominantly middle double bonds) **polybutene** or polyisobutene having Mn of from 150 to 5 000, preferably from about 500 to 2 000, in particular from about 800 to 1 500.g (paragraph 0036). Additives containing nitro groups, if necessary in combination with hydroxyl groups are preferably reaction products of **polyisobutenes** having an average degree of polymerization P of from 5 to 100 or from 10 to 100 with oxides of nitrogen or mixtures of oxides of nitrogen and oxygen (paragraph 0055). Additives containing hydroxyl groups in combination with mono-polyamino groups are in particular reaction products of **polyisobutene epoxides**, obtainable from polyisobutene preferably having predominantly terminal double bonds and having an Mn of from 150 to 5 000, ammonia or mono- or polyamines, as described in particular (paragraph 0057). Additives containing carboxyl groups or their alkali metal or alkaline earth metal salts are preferably **copolymers** of C₂-C₄₀-olefins

with maleic anhydride, which have a total molar mass of from 500 to 20 000 and some or all of whose carboxyl groups have been converted into the alkali metal or alkaline earth metal salts and the remainder of the carboxyl groups have been reacted with alcohols or amines (paragraph 0058). Additives containing sulfo groups or their metal or alkaline earth metal salts are preferably alkali metal or alkaline earth metal salts of an **alkyl sulfosuccinate** (paragraph 0059).

Examples of suitable **polyethers** or polyetheramines are compounds which preferably contain polyoxy-C2-C4-alkylene groups and are obtainable by reaction of C2-C6,-alkanols, C6-C3,-alkanediols, mono- or di-C2-C3,- alkylamines, Cl-C3,-alkylcyclohexanols or Cl-C3,-alkylphenols with from 1 to 30 mol of ethylene oxide and/or propylene oxide and/or butylene oxide per hydroxyl group or amino group and, in the case of the polyetheramines, by subsequent reductive amination with ammonia, monoamines or polyamines (paragraph 0045).

Examples of **carboxylic esters** of long-chain alkanols are in particular esters of mono-, di- or tricarboxylic acids with long-chain alkanols or polyols (paragraph 0046). Additives containing groups derived from succinic with hydroxyl and/or amido and/or imido groups are preferably corresponding derivatives of polyisobutenyl succinic anhydride, which are obtainable by reacting conventional highly reactive polyisobutene having a Mn of from 150 to 5000 with maleic anhydride by a thermal route or via the chlorinated polyisobutene (paragraph 0060). Additives containing groups produced by Mannich reaction of substituted phenols with aldehydes and mono- or polyamines (paragraph 0061). The

gasoline fuel may furthermore have an olefin content of not more than 21, e.g. from 6 to 21, % by volume (paragraph 0070). The benzene content may be not more than 1.0, e.g. from 0.5 to 1.0, % by volume; the oxygen content may be, for example, from 0.1 to 2.7% by weight (paragraph 0072). The fuel may be, for example, a gasoline fuel having aromatics content of not more than 42, e.g. from 20 to 42% by volume (paragraph 0069). The further fuel additives which may be used and which have the polar groups are added to the fuel usually in an amount of from 10 to 5 000 ppm, in particular from 50 to 1000 ppm (paragraph 0068).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The reference **JOHNSTON et al. (PCT/US86/01592)** discloses a fuel composition for internal combustion engines.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **LATOSHA HINES** whose telephone number is 571-270-5551. The examiner can normally be reached on Monday thru Thursday from 8 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ellen M McAvoy/

Primary Examiner, Art Unit 1797

/LATOSHA HINES/
Examiner, Art Unit 1797